Title (en)

Apparatus and associated method for detecting values of a space-time block code using selective decision-feedback detection

Title (de)

Vorrichtung zur Detektion STBC-codierter Daten anhand selektiver entscheidungsrückgekoppelter Detektion und ein dazugehäriges Verfahren

Title (fr)

Appareil et procédé associés, pour détecter les valeurs d'un code séquence d'espace-temps utilisant une détection de retour de décision sélective

Publication

EP 1993246 B1 20090715 (EN)

Application

EP 07108420 A 20070517

Priority

EP 07108420 A 20070517

Abstract (en)

[origin: EP1993246A1] A selective decision-feedback detector for the space-time block code which provides both diversity and spatial multiplexing. To detect a received code block of transmitted symbols, the channel matrix is properly preprocessed with the real and imaginary parts decoupled, and the selective decision-feedback detector makes multiple decisions on the same block upon differently permuted channel matrix and generates multiple candidates for the results. The indicators of the decision errors associated with the candidates are compared, and one of the candidates with the minimum error is selected by a selector as the decided symbols to be used for further processing at a receiving station.

IPC 8 full level

H04L 25/03 (2006.01)

CPC (source: EP)

H04L 1/0631 (2013.01); **H04L 25/03057** (2013.01); **H04L 25/067** (2013.01); H04L 1/0668 (2013.01); H04L 25/0246 (2013.01)

Cited by

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Designated contracting state (EPC)

DE ES FR GB IT

DOCDB simple family (publication)

EP 1993246 A1 20081119; **EP 1993246 B1 20090715**; CA 2687343 A1 20081127; CA 2687343 C 20140715; DE 602007001590 D1 20090827; ES 2329839 T3 20091201; WO 2008141461 A1 20081127

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EP 07108420 A 20070517; CA 2008000988 W 20080516; CA 2687343 A 20080516; DE 602007001590 T 20070517; ES 07108420 T 20070517